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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/400,764	09/21/1999	TIMOTHY J. MOULSLEY	PHB-34.288	3782

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EXAMINER

TRAN, TUAN A

ART UNIT PAPER NUMBER

2684

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/400,764

Applicant(s)

MOULSLEY, TIMOTHY J.

Examiner

Tuan A Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 1999.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 and 8-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5 and 8-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 2-5 and 8-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulbert (5,713,074) in view of Hamabe (5,396,649) and further in view of Agrawal et al. (5,722,051).

Regarding claim 5, Hulbert discloses a digital wireless communication system (See fig. 1 and col. 1 lines 5-12) comprising: at least one transmitter 20 having means for transmitting first units information at a first power level (See fig. 1 and col. 3 line 56-60); at least one receiver 22 for receiving the transmitted information units (See fig. 1 and col. 3 line 60); control means 36 for controlling the transmitter output power (See fig. 1 and col. 2 lines 28-29); and monitoring means 30 for monitoring if correction reception of the transmitted units occurred at the receiver 22 (See fig. 1 and col. 4 lines 4-7), wherein the transmitting means transmits second information units associated with the first information units for which first information units the monitoring means does not indicate correct reception has occurred, the second information units being transmitted at a second power level that is greater than the first power level, the second power level being selected by the control means (See fig. 1 and col. 3 line 56 to col. 4 line 18), and

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wherein the second information units allow the content of the first information units to be established (See col. 3 lines 47-55, col. 4 lines 57-63). However, Hulbert does not mention that the first power level is selected to increase a probability of failed first information unit transmission and of consequent second information unit transmission and to minimize average power consumption taking into account the first power level and the second power level, the first power level being the lowest level to correspond to a maximum allowable probability of failed first information unit transmission and of consequent second information unit transmission. Hamabe teaches to select transmission power in sequential steps from a minimum transmission power level up to a maximum transmission power level (See col. 3 lines 50-57), wherein the minimum transmission power level inherently correspond to a maximum probability of failed transmission and as the Applicant admitted (See Specification, page 5 lines 23-25). Agrawal suggests to choose transmission power levels with the goal of minimizing the power used in transmitting (See col. 5 line 16-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the Hamabe's teachings in arranging the transmitter, as disclosed by Hulbert, by transmitting the first information unit at the lowest power level to increase probability of failed first information unit transmission and of consequent second information unit transmission to a maximum allowable probability, and further to apply the teachings of Agrawal in choosing power levels including first and second power levels to minimize the average power consumption, for the advantage of decreasing level of channel interference to enhance the quality of service and conserving the power.

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Claims 12-13 and 15 are rejected for the same reasons as set forth in claim 5, as apparatus.

Claims 14 and 18-19 are rejected for the same reasons as set forth in claim 5.

Regarding claims 8-9, Hulbert & Hamabe & Agrawal disclose as cited in claim 12. However, they do not mention the content of the second information units is the same as the content of the first information units. Hulbert further discloses the transmitting station 20 has a capable of transmitting second information units to compensate for the errors occurred during the transmission of the first information units (See col. 3 lines 47-77, col. 4 lines 57-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the transmitting station to transmit the second information units as same as the first one in contents in order to allow the receiving station to receive properly data.

Claim 2 is rejected for the same reasons as set forth in claims 8-9, as method.

Regarding claim 3, Hulbert & Hamabe & Agrawal disclose as cited in claim 5. Hulbert further discloses the wireless communication system utilized CDMA, inherently information units are data packets (See col. 1 lines 5-12, 60-61).

Regarding claim 4, Hulbert further discloses monitoring is performed by the transmitting station based on information provided by the receiving station (See fig. 1 and col. 3 line 56 to col. 4 line 18).

Regarding claims 10-11, Hulbert & Hamabe & Agrawal disclose as cited in claim 12. Hulbert further discloses the communication system is a cellular mobile radio

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telephone system wherein the transmitter station is employed as a component of the cellular radio telephone system (See fig. 1 and col. 1 lines 11-25).

Regarding claim 16-17, Hulbert & Hamabe & Agrawal discloses as cited in claim 5. However, they do not mention that the second information units include forward error correction information associated with the first information units, wherein the forward error correction information is enhanced. Hulbert further discloses the transmitting station 20 has a capable of transmitting second information units to compensate for the errors occurred during the transmission of the first information units (See col. 3 lines 47-77, col. 4 lines 57-63). Forward error correction technique is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this technique by including enhanced forward error correction information into the information that is retransmitted to compensate for the errors occurred in the previous transmission for the advantage of allowing the receiving end to receive correct data.

Response to Arguments

Applicant's arguments filed 11/06/2002 have been fully considered but they are not persuasive.

a. The Applicant argued that the well-known statement made by the examiner is improper (See Remark, page 3 last paragraph). In response to the Applicant's argument, the Examiner would like to present the U.S. Patent 5,396,649 published on March 7, 1995 to Hamabe, wherein Hamabe teaches to select

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transmission power in sequential steps from a minimum transmission power level up to a maximum transmission power level (See col. 3 lines 50-57), wherein the minimum transmission power level inherently correspond to a maximum probability of failed transmission and as the Applicant admitted (See Specification, page 5 lines 23-25).

Therefore, the Examiner respectfully disagrees with the Applicant.

b. The Applicant argued that the examiner contradicts himself in the Office Action at lines 13-16 (See Remark, page 4 second paragraph). The examiner respectfully disagrees with the Applicant because at line 13-16 of page 3 of the Office Action, the Examiner stated: "Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the transmitter, as disclosed by Hulbert, to transmit the first information unit at the lowest power level to increase probability of failed first information unit transmission and of consequent second information unit transmission to a maximum allowable probability, and further to apply the teachings of Agrawal in...". The Examiner did not say the feature is disclosed by Hulbert, but to arrange the transmitter as disclosed by Hulbert to do the feature.

c. The Applicant argued that the Examiner makes improper leap of logic (See Remark, page 4 third paragraph). The Examiner respectfully disagrees with the Applicant because Agrawal suggests to choose transmission power levels **with the goal of minimizing** the power used in transmitting (See col. 5 line 16-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teachings of Agrawal in choosing power levels including first and second power levels to minimize the average power consumption, for the advantage of

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decreasing level of channel interference to enhance the quality of service and conserving the power. Further, the Applicant argued that a number of addition calculation steps are necessary in order to choose first and second power levels with minimized average power consumption (See remark, page 4 third paragraph). These steps were not disclosed in the claims.

d. The applicant argued that Hulbert at col. 3 lines 47-77 and col. 4 line 57-63 teaches that in response to the errors the transmitting inverts its transmission and does not teach or suggest the content of the second information unit is the same as the first one (See Remark, page 4 last paragraph). The Examiner agrees with the Applicant that Hulbert does not mention the content of the second information units is the same as the content of the first information units, but Hulbert discloses that the transmitting station 20 has a capable of transmitting second information units to compensate for the errors occurred during the transmission of the first information units (See col. 3 lines 47-77, col. 4 lines 57-63). It is well known for person skilled in the art that to compensate for the errors occurred in a transmission, one of the ways is to retransmit the same information again. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the transmitting station to transmit the second information units as same as the first one in contents in order to allow the receiving station to receive properly data.

Conclusion

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Daniel Hunter**, can be reached at **(703) 308-6732**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

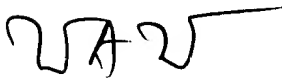
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Tuan Tran

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DANIEL HUNTER
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